How many volcanoes do you think there are in Auckland...10, 20, or 30?...well actually, did you know there are 48 volcanoes across Auckland City. WOW it’s like sitting amongst a whole lot of giant volcanic firecrackers. What a scary thought. If 1 was to blow, what would you do? Luckily most of these 48 volcanoes are now extinct, meaning not active, so you can breathe easy.

What actually makes a volcano and how are they formed? A volcano is like a mountain facing upside down that goes down below the Earths crust to a layer of molten rock called mamga. The volcano then erupts sending rock and gas exploding up and out. Once above the earths surface the molten rock ‘ ash and gases begin to form cone shapes or sometimes round flat shapes like Rangitoto island.

Once the magma reaches the surface and spills out from a volcano it turns into lava. Once this has cooled it creates a very hard rock. A lot of Auckland’s land has been created by this happening from all of our volcanoes lava flow, which happened thousands of years ago. You can still see how this happened if you go to the summits of Mt Eden or some of the other taller ones we have in our city.

I went to MT Wellington and collected a rock, known as ‘basalt’ that is created when MAGMA turns to lava then cools .Most of our city is built on it. It is strong and carries water. Here is a sample - pass it around, you can see the bubbles left by the gasses.

The early Maori also used these extinct volcanoes as Pah’s as they were a great place to build forts and see for miles around. The soil was also very rich and good for growing food. Without all of these volcanoes Auckland would be a very different looking place today how do you think it would look??

In New Zealand we still have quite a few active volcanoes like White Island which is in the Bay of Plenty, it is NZ's only live marine volcano. It is a popular tourist attraction, which breathes, roars and hisses; it can be seen smoking away, it's amazing!

Ruapehu erupted only a few years ago in 1995 sending huge clouds of ash into the sky and causing the crater lake to spill over the side of the mountain.This spill was called a muddy laha and was quite capable of causing bad damage if anything got in its way. Ruapehu is the largest active volcano in New Zealand, which is 40km southwest of Lake Taupo.

Tonga-riro is another volcano near Rua-pehu, one of the 3 active volcanoes south of Lake Taupo. There has been new volcanic alerts due to new activity and is having a little rumble at the moment.

Did you know Lake Taupo is the crater of one of the biggest volcanoes the world has ever had which erupted thousands of years ago?

To summarise volcanoes are present all over the world and are like a valve to let pressure out on our living planet. They are an amazing part of our world, and will always be with us.